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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,958	12/07/2001	William Girard McCollom	10010635-1	7352

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EXAMINER	
WALSH, JOHN B	

ART UNIT	PAPER NUMBER
2151	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/016,958	MCCOLLOM ET AL.	
	Examiner	Art Unit	
	John B. Walsh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-8,10,11,13-17 and 19-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *22-27* is/are allowed.

6)☒ Claim(s) *1-4,6-8,10,11,13-17,19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 8 and 13 are objected to because of the following informalities: Insert a period (".") at the end of claim 1.

Claim 8, line 4 – delete the period (".") after "system".

Claim 13, line 1 recites "of claim I". It appears this should be "of claim 1". Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 14-17 and 19-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 14 recites a system. The use of the word "system" does not inherently render the claim to satisfy a statutory category of a "machine". The claims do not recite a physical part of a device and the recited "router" is not an element of the system, but instead is for use with the system. The claims appear to suggest, to one of ordinary skill in the art, to be implemented by software alone.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 6-8, 10, 11, 13-17 and 19-21 (claims 14-17and19-21 as best understood) are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,269,157 to Klinker et al.

As concerns claim 1, a method of determining autonomous system volume data comprising: collecting data flow statistics (col. 3, lines 50-51-flow analyzer; col. 7, line 64-col. 8, line 9) for at least one router (col. 18, line 7; col. 7, line 49); collecting routing information base data (col. 8, lines 10-33; fig. 15) for each of the at least one router; and, thereby yielding autonomous system volume data (col. 8, lines 26-27); wherein the collected routing information base data for the at least one router comprises at least one selected autonomous system path (col. 14, lines 28-30; fig. 15); wherein the step of correlating the routing information base data and the data flow statistics comprises correlating a data flow statistic corresponding to a destination address (col. 16, lines 23-25; col. 18, lines 13-16) to each autonomous system included in an autonomous system path corresponding to the destination address (col. 16, lines 35-36-changes to routing tables).

As concerns claim 2, the method of claim 1, further comprising, following the step of correlating: analyzing the autonomous system volume data (col. 8, lines 35-50 and col. 8, lines 53-64-analyze for billing); and reporting results of the step of analyzing (col. 8, lines 53-64-billing is reporting).

As concerns claim 3, the method of claim 1, wherein the step of collecting the data flow statistics for the at least one router comprises: collecting the data flow statistics during a pre-determined time

interval (col. 17, line 12), and aggregating the data flow statistics by destination address (col. 16, lines 23-25).

As concerns claim 4, the method of claim 1, wherein the step of collecting the data flow statistics for the at least one router comprises using a data flow collection program (col. 8, lines 1-9; passive flow analyzer 165).

As concerns claim 6, wherein the step of collecting the routing information base data for the at least one router comprises taking a snapshot of border gateway protocol data (fig. 9; 183-BGP routing table; col. 19, line 53).

As concerns claims 7 and 16, wherein the step of correlating comprises: identifying a destination address (col. 3, line 28) in the data flow statistics (col. 3, lines 42-65); identifying a prefix (col. 8, line 9; fig. 15-19) corresponding to the destination address, identifying an autonomous system path (fig. 15-19) corresponding to the prefix; correlating a data flow statistic corresponding to the destination address to each autonomous system included in the autonomous system path (col. 3, lines 42-65).

As concerns claims 8 and 17, wherein the step of correlating comprises; identifying a destination address (col. 3, line 28) in the data flow statistics; and correlating a data flow statistic corresponding to the destination address to each autonomous system included in an autonomous system path corresponding to the destination address (col. 3, lines 42-65).

As concerns claim 10, the method of claim 7, wherein the step of correlating comprises repeating the steps of claim 7 for each destination address of the data flow statistics of each of the at least one router (col. 11, lines 45-53; col. 23, lines 43-65; claim cover instance if only have one router than steps are not repeated and claim limitations are satisfied).

As concerns claim 11, the method of claim 8, wherein the step of correlating comprises repeating the steps of claim 8 for each destination address of the data flow statistics of each of the at least one router (col. 11, lines 45-53; col. 23, lines 43-65; claim cover instance if only have one router than steps are not repeated and claim limitations are satisfied).

As concerns claim 13, the method of claim 1, further comprising: computing at least one synthetic autonomous system path (col. 14, lines 28-30; fig. 15); and reporting autonomous system volume data (col. 8, lines 26-27) of the at least one synthetic autonomous system path.

As concerns claim 14, a system for determining autonomous system volume data comprising: a data flow collection node (fig. 2 and 6; 165, 250) adapted to collect data flow statistics (col. 3, lines 50-51-flow analyzer; col. 7, line 64-col. 8, line 9) from at least one router, a routing information base collection node (fig. 2 and 6; 161, 165, 250) adapted to periodically collect routing information base data (col. 8, lines 10-33; fig. 15) from the at least one router; and a correlation node (fig. 2 and 6; 166,168, 252) adapted to correlate the routing information base data and the data flow statistics and thereby yield autonomous system volume data (col. 8, lines 26-27); wherein the correlation node is adapted to correlate a data flow statistic corresponding to a destination address (col. 16, lines 23-25; col. 18, lines 13-16) to each autonomous system included in an autonomous system path corresponding to the destination address (col. 16, lines 35-36-changes to routing tables).

As concerns claim 15, the system of claim 14, further comprising a reporting node (508) adapted to analyze and report on the autonomous system volume data (col. 8, lines 35-50 and col. 8, lines 53-64-analyze for billing).

As concerns claim 19, the system of claim 14, wherein at least two of the data flow collection node, the routing information base collection node, and the correlation node are the same node (541).

As concerns claim 20, the system of claim 14, wherein the data flow collection node, the routing information base collection node, and the correlation node are each a separate node (fig. 6).

As concerns claim 21, the system of claim 14, further comprising a reporting node (508) adapted to report autonomous system volume data on at least one synthetic autonomous system path.

Allowable Subject Matter

6. Claims 22-27 are allowed.

Response to Arguments

7. Applicant's arguments, see Appeal Brief, filed January 30, 2008, with respect to the rejection(s) of claim(s) 1-4,6-8,10, 11, 13-17 and 19-27 under 35 USC 102(e) to Farrell have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 7,269,157 to Klinker et al.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 7,035,934 teaches BGP routing tables. It fails to disclose, collecting data flow and correlating the data flow with the destination and autonomous system and incrementing counters for an autonomous system volume as claimed in detail by the applicant.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John B. Walsh/
Primary Examiner
Art Unit 2151